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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,745	07/30/2003	Hee Bok Kang	40296-0034	8920

26633 7590 03/16/2005

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EXAMINER

NGUYEN, DANG T

ART UNIT PAPER NUMBER

2824

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,745	KANG, HEE BOK	
	Examiner	Art Unit	
	Dang T. Nguyen	2824	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Search history</u> . |

DETAILED ACTION

1. This office action is in response to applicant amendment filed on 1/04/05. Claims 1 – 15 are pending on this application.

Response to Arguments

2. Applicant's arguments with respect to claim 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 15 rejected under 35 U.S.C. 102(b) as being anticipated by

MacWilliams et al., U.S. Patent No. 6,253,302 – filed Aug. 29, 1996.

Fig. 2 of MacWilliams et al, discloses a composite memory device, comprising: a plurality of memory devices (266, 268 of 201, and [local memory, Storage Device] of 202) configured to operate individually; a memory bus [212, 213] configured to transfer data among the plurality of memory devices; and a plurality of memory controllers [265, 267] configured to control data transfer operation between the memory bus [212] and a memory device [266, 268] among the plurality of the memory devices respectively, wherein the plurality of memory devices are controlled by an external memory controller

[207] to exchange data with an external system bus [208], and when one [266] of the plurality of the memory devices exchanges data with the external system bus [208], the rest memory devices are allowed to exchange data via the memory bus (This is inherent to Fig. 2 of MacWilliams et al. because the other memory devices such as [268], local Memory, and Storage device are configured for allowing data exchange via memory bus [212, 213]).

Allowable Subject Matter

4. Claims 1 - 14 are allowed.
5. The following is an examiner's statement of reasons for allowance:

With respect to claim 1, in addition to other elements in the respective claim, the prior art fails to teach or suggest "a second synchronous memory device configured to operate in a page mode; a first memory controller configured to control data transfer operation between the first memory device and the memory bus; a second memory controller configured to control data transfer operation between the second memory device and the memory bus; and a third memory controller configured to control data transfer operation between the third memory device and the memory bus".

Prior art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nagashima

Patent No. 6,762,962 B2

Date of Patent: Jul. 13, 2004

Contact Information


7. Any inquiry concerning this communication from the examiner should be directed to Dang Nguyen, who can be reached by telephone at (571) 272-1955. Normal contact times are M-F, 8:00 AM - 4:30 PM.

Upon an unsuccessful attempt to contact the examiner, the examiner's supervisor, Richard Elms, may be reached at (571) 272-1869.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is (703) 305-3900. The faxed phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the Status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.

Dang Nguyen 3/8/2005


RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800